Active
L1: (101) cyanothiazole
L2: (38) l1 and acrylonitrile
L3: (0) l2 and thiourea
L4: (193) (548/198).CCLS.
L5: (8) acrylonitrile and (548/198).ccls.

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=> s cyanothiazole
            90 CYANOTHIAZOLE
=> s l1 and acrylonitrile
         85067 ACRYLONITRILE
             2 L1 AND ACRYLONITRILE
L2
=> d 1-2 fbib abs fhitstr
     ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
L2
     1967:94981 CAPLUS
AN
DN
     66:94981
     Synthesis of thiazolo[4,5-d]pyridazine and some derivatives
TI
     Robba, Max; Le Guen, Yves
ΑU
     Ecole Natl. Med. Pharm., Vaubernard, Fr.
CS
     Comptes Rendus des Seances de l'Academie des Sciences, Serie C: Sciences
SO
     Chimiques (1966), 263(22), 1385-7
     CODEN: CHDCAQ; ISSN: 0567-6541
DT
     Journal
     French
LA
     For diagram(s), see printed CA Issue.
GΙ
AΒ
     The cyclization of 4,5-diformylthiazole (I) with N2H4 in EtOH at room
     temperature gave thiazolo[4,5-d]pyridazine (II), m. 202°, sublimable at
     170° at 0.1 mm. The reduction of II with 4,5-dicyanothiazole
     diisobutylaluminum hydride gave I, yellow needles, m. 66°. Also
     produced in the reaction was 4-(or 5)-formyl-5-(or 4)-
     cyanothiazole, which was separated by fractional sublimation, m.
     108°. The II substituted in the 6-position by aliphatic, aromatic,
     or heterocyclic radicals were prepared by catalytic dehalogenation of IIa (X
     = Cl). The 1,4-dichloro-6-\alpha-thienyl derivative of II was reduced under
     100 kg. H at 100° in the presence of Pd on C to yield
     6-\alpha-thienyl derivative of II, yellow crystals, m. 194°.
     substituted in the 1-, 4-, and 6-positions were synthesized from the
     following di-Et esters (III) of 4,5-thiazolodicarboxylic acids from the
     cyclization of thioamides with Et chloroxalacetate (R given): Et, b2
     155°; \alpha-furyl, m. 85°; \alpha-thienyl, m. 70°;
     and \beta-thienyl, m. 70°. The diesters were converted to
     dihydrazides (IV) by refluxing in alcs. or pyridine (R given): Et, m.
     167°; \alpha-furyl, m. 252°; and \alpha-thienyl, m.
     253°. V were obtained by condensation of III with N2H4 or by
     cyclization of IV in AcOH (R and m.p. given): H, 350°; Et,
     280°; \alpha-furyl, 385°; \beta-thienyl, 330°.
     Halogenation with POCl3 and POBr3 gave the corresponding IIa (R, X, and
     m.p. given): 1,4-H, Cl, 172°; H, Br, 226°; Et, Cl,
     63°; Ph, Cl, 196°; α-furyl, Cl, 185°;
     \alpha-thienyl, Br, 195°; and \beta-thienyl, Cl, m. 212°.
     Exchange reaction between 1,4-dichloro derivs. of II and HI gave the
     corresponding IIa (X = I) (R and m.p. given): Ph, 197°;
     \alpha-thienyl, 205°; and \beta-thienyl, 210°. The
     nucleophilic attack of IIa by Na alcoholates gave VII (R, R1, and m.p.
     given): Me, MeO, 169°; Ph, EtO, 156°; α-furyl, EtO,
     176°; \alpha-thienyl, MeO, 197°; and \beta-thienyl, EtO,
     171°. The VIII were prepared by heating IIa(X = Cl) with alc. solns.
     of thiourea (R of VIII and m.p. given): H, 275°; Et, 250°;
     \alpha-furyl, 270°; \alpha-thienyl, 288°; and
     \beta-thienyl, 281°. The derivs. (VIII) were condensed with Me or
     Et sulfate, PhCH2Cl, ClCH2CO2H, or acrylonitrile to give a
     series of substituted VIII (IX) (R, R1, and m.p. given): Ph, Me,
     196°; \alpha-thienyl, Et, 133°; \alpha-furyl, Me,
     183°; Ph, PhCH2, 159°; \beta-thienyl, PhCH2, 175°;
     \alpha-thienyl, CH2CO2H, 127°; and \beta-thienyl, CH2CH2CN,
     147°.
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L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1957:54475 CAPLUS

DN 51:54475

OREF 51:10068c-e

TI Water-insoluble monoazo dyes

IN Taube, Karl

PA Farbenfabriken Bayer A.-G.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI DE 952017 19561108 DE

Diazotized 2-amino-4-methyl-5-cyanothiazole (I) combined with aniline derivs. free from SO3H and COOH radicals gives water-insol. monoazo dyes suitable for dyeing acetate rayon, polyamide, polyurethan, polyester, or polyacrylonitrile fibers, lacquers, and plastics. I 2.78 g. was diazotized in 40° B.acte.e. H2SO4 50 cc. with cooling, the yellow diazo solution dropped into a solution prepared by dissolving 3-MeC6H4N(C2H4OH)2 3.67 g. in 50% AcOH 25 cc. and pouring the solution into ice water 1000 cc. The resulting azo dye which may be recrystd. from MeOH gives acetate rayon and polyamide fibers clear violet shades of good light-fastness. Violet dyes are similarly prepared from diazotized I and 3-MeC6H4NEt2 or 3-EtOC6H4NEt2.